REMARKS

Claims 28-36 are all the claims pending in the application. Claims 28 and 34 are independent claims.

Claim Rejections Under 35 U.S.C. § 102

Claims 28, 29, 32, and 33 are rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Dragone et al. (US 5,926,586).

Claim 28, 29, 32, and 33

Applicants have amended independent claim 28 to recite that, in accordance with the chip manufacturing method, each element includes a substantially arcuate shape, each chip includes a concave boundary line and a convex boundary line that substantially follow an outline of said one of the elements, and the concave boundary line of one chip of said plurality of chips is shaped the same as the convex boundary line of another chip of said plurality of chips that adjoined said one chip on said wafer. This amendment finds support in the original specification at least by the *non-limiting* embodiment shown in Fig. 4, and the description thereof.

Applicant respectfully requests that the Examiner withdraw the rejection of claim 28 at least because Dragone does not teach or suggest all of the recitations of claim 28. For example, Dragone does not teach or suggest the claimed manufacturing method in which the concave boundary line of one chip of said plurality of chips is shaped the same as the convex boundary line of another chip of said plurality of chips that adjoined said one chip on said wafer.

Dragone discloses technique for manufacturing waveguides in which multiple optical devices (e.g., routers) are formed from the same substrate wafer by cutting the optical elements along curved contour lines that follow the shape of the optical. *See* Dragone at Fig. 5.

However, the convex boundary line of one cut router of Dragone is not shaped the same as the concave boundary line of another of the cut routers. *See* Dragone at Fig. 5. Instead, the router's boundary lines have different shapes.

Moreover, the multiple router elements of Dragone are not adjoined on the wafer. Instead, the router elements are arranged **at unnecessary intervals on the wafer**. As a result, there not as many router elements are made from a single wafer as can be made by the claimed method.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of claim 28. In addition, Applicant respectfully requests that the Examiner withdraw the rejection of claims 29, 32, and 33 at least because of their dependency from claim 28.

Claim Rejections Under 35 U.S.C. § 103

Claims 30 and 31 are rejected under 35 U.S.C. § 103(a) as being allegedly anticipated by Dragone in view of Distefano et al. (US 5,776,796). Claims 34 and 35 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Dragone in view of Reinker (US 5,745,631). Claim 36 is rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Dragone in view of Reinker, as applied to claim 34, and further in view of Forbes et al. (US 6,376,909).

Claims 30 and 31

Applicant respectfully requests that the Examiner withdraw the rejection of dependent claims 30 and 31 at least because of their dependency from claim 28 and because Distefano, which was cited by the Examiner as showing a ultrasonic vibration or hydraulic pressure for cutting chips, does not cure the deficiencies in Dragone discussed above.

Claims 34 and 35

Applicants have amended independent claim 34 to recite that, in accordance with the chip manufacturing method, each element includes a substantially arcuate shape, each of said first chips includes a concave boundary line and a convex boundary line that substantially follow an outline of said one of the elements, and the concave boundary line of said one first chip of said first chips is shaped the same as the convex boundary line of another of said first chips that adjoined said one first chip on said wafer. This amendment finds support in the original specification at least by the *non-limiting* embodiment shown in 13, and the description thereof.

Applicant respectfully requests that the Examiner withdraw the rejection of claim 34 at least because Dragone and Reinker, either individually or in combination, do not teach or suggest all of the recitations of claim 28. For example, the combination of Dragone and Reinker does not teach or suggest the claimed manufacturing method in which the concave boundary line of said one first chip of said first chips is shaped the same as the convex boundary line of another of said first chips that adjoined said one first chip on said wafer.

Dragone does not teach or suggest this feature, as is discussed above with respect to independent claim 28. Moreover, Reinker, which was cited by the Examiner as showing an

optical multiplexer formed by stacking chips and flowing adhesive, does not cure the deficiencies in Dragone discussed above.

Claim 36

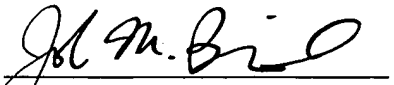
Applicant respectfully requests that the Examiner withdraw the rejection of dependent claim 36 at least because of their dependency from claim 34 and because Forbes, which was cited by the Examiner as showing a stacked chip structure in which chips can be cut from the same wafer or different wafers, does not cure the deficiencies in Dragone discussed above.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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